Data Symbols	A	B	C	D	E	F	G	H	I	J	K	L
Huffman Codes	00	010	100	101	110	0110	0111	11100	11101	11110	111110	111111

FIGURE 1

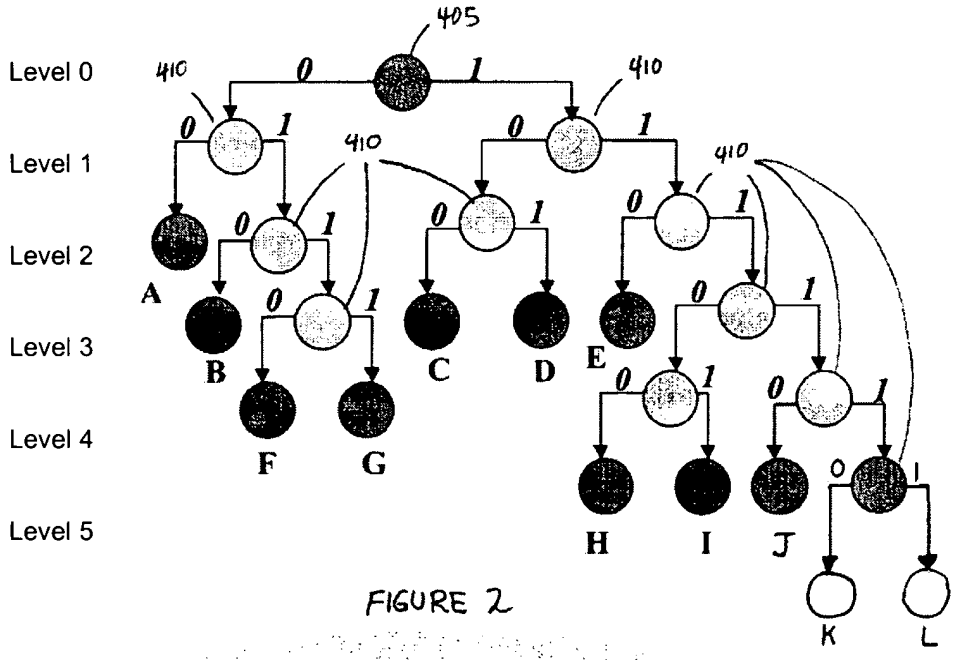
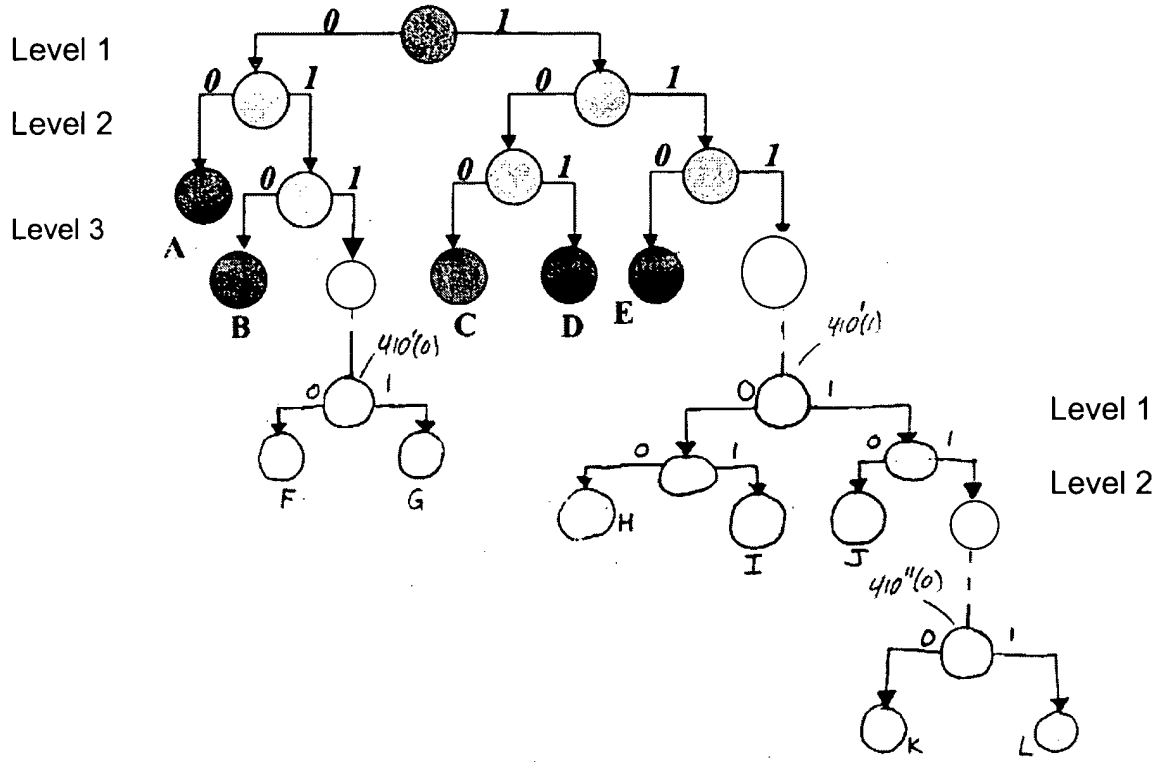


FIGURE 2


Level 1
Level 2
Level 3
A
B
C
D
E
F
G
H
I
J
K
L
410'(0)
410'(1)
410"(0)
Level 1
Level 2

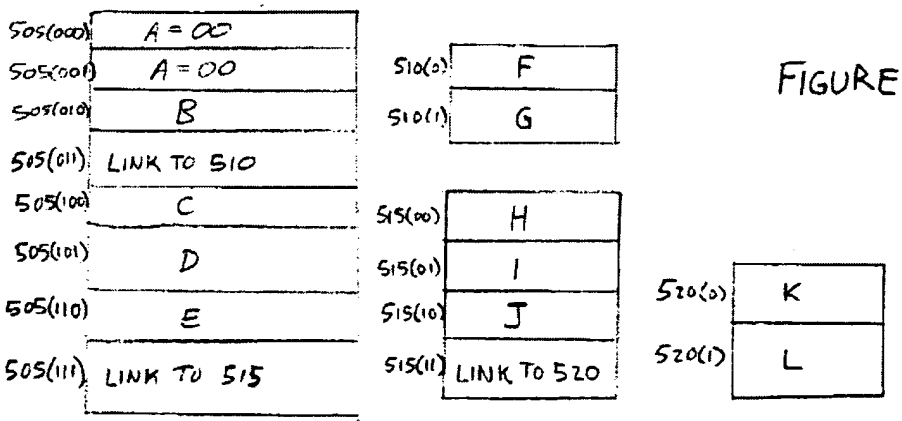

505(000) A = 00
505(001) A = 00
505(010) B
505(011) LINK TO 510
505(100) C
505(101) D
505(110) E
505(111) LINK TO 515
510(0) F
510(1) G
515(00) H
515(01) I
515(10) J
515(11) LINK TO 520
520(0) K
520(1) L

FIGURE 3

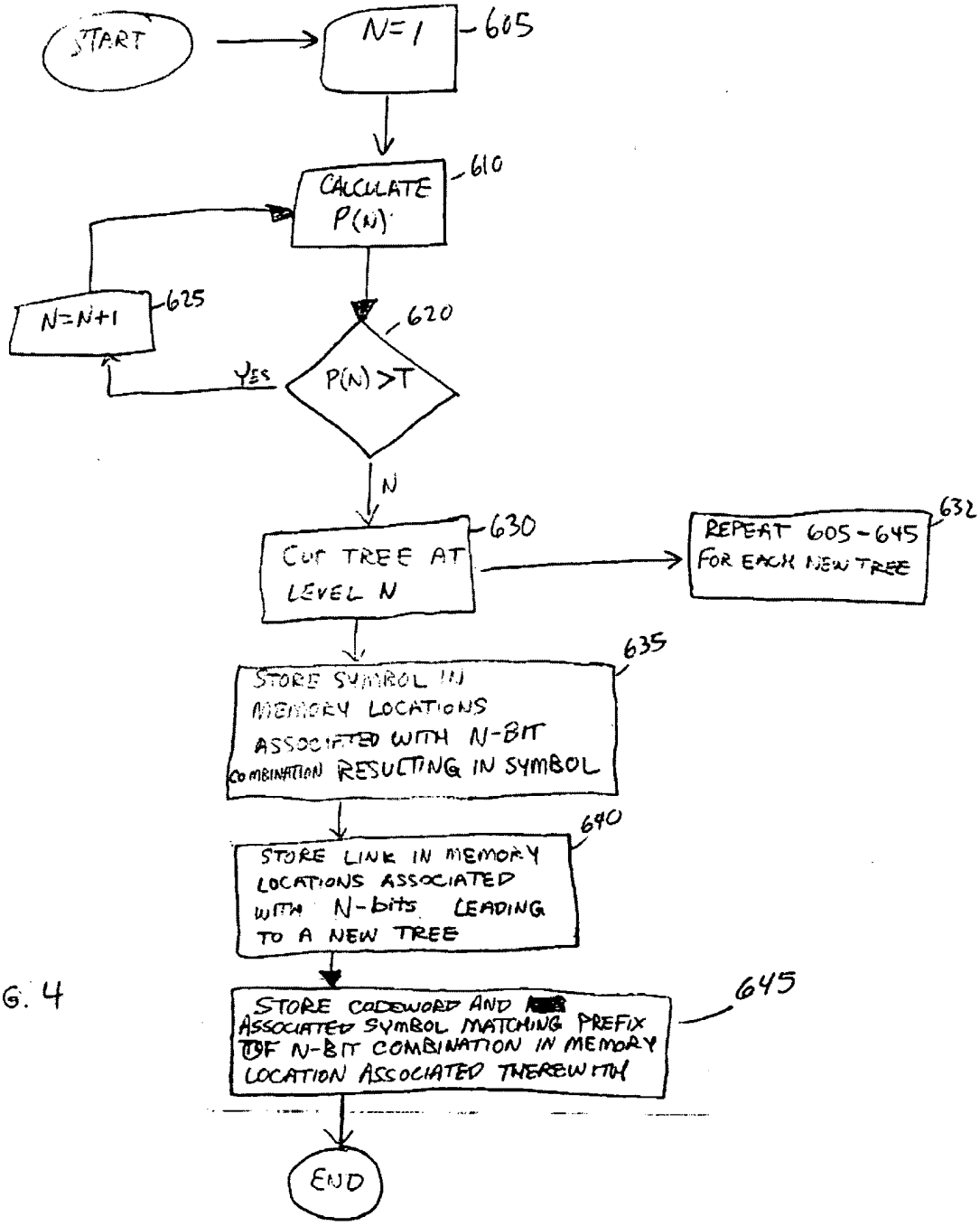

START
N=1
605
CALCULATE P(N)
610
N=N+1
625
620
YES
P(N)>T
N
CUT TREE AT LEVEL N
630
REPEAT 605-645 FOR EACH NEW TREE
632
STORE SYMBOL IN MEMORY LOCATIONS ASSOCIATED WITH N-BIT COMBINATION RESULTING IN SYMBOL
635
STORE LINK IN MEMORY LOCATIONS ASSOCIATED WITH N-bits LEADING TO A NEW TREE
640
STORE CODEWORD AND ASSOCIATED SYMBOL MATCHING PREFIX OF N-BIT COMBINATION IN MEMORY LOCATION ASSOCIATED THEREWITH
645
END

FIG. 4

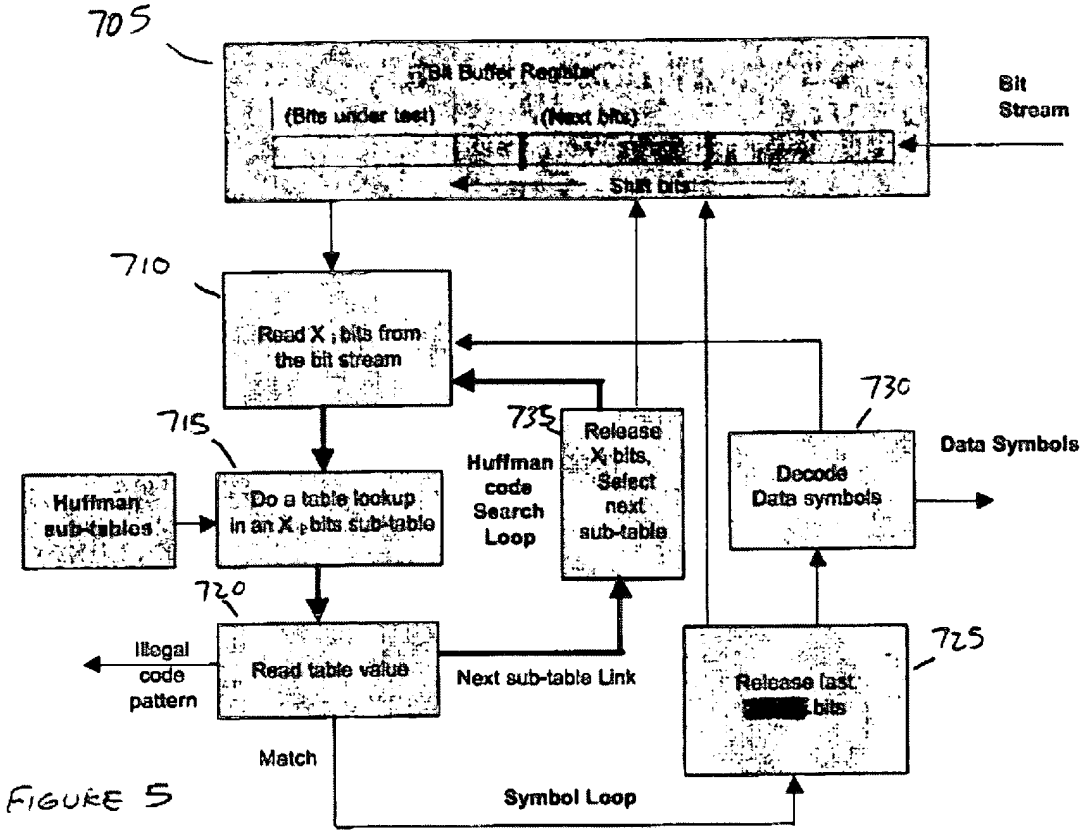

705
Bit Buffer Register
(Bits under test)
(Next bits)
Shift bits
Bit Stream
710
Read X1 bits from the bit stream
715
Huffman sub-tables
Do a table lookup in an X1 bits sub-table
720
Illegal code pattern
Read table value
Next sub-table Link
Match
Symbol Loop
Huffman code Search Loop
735
Release X1 bits, Select next sub-table
730
Decode Data symbols
Data Symbols
725
Release last bits

FIGURE 5

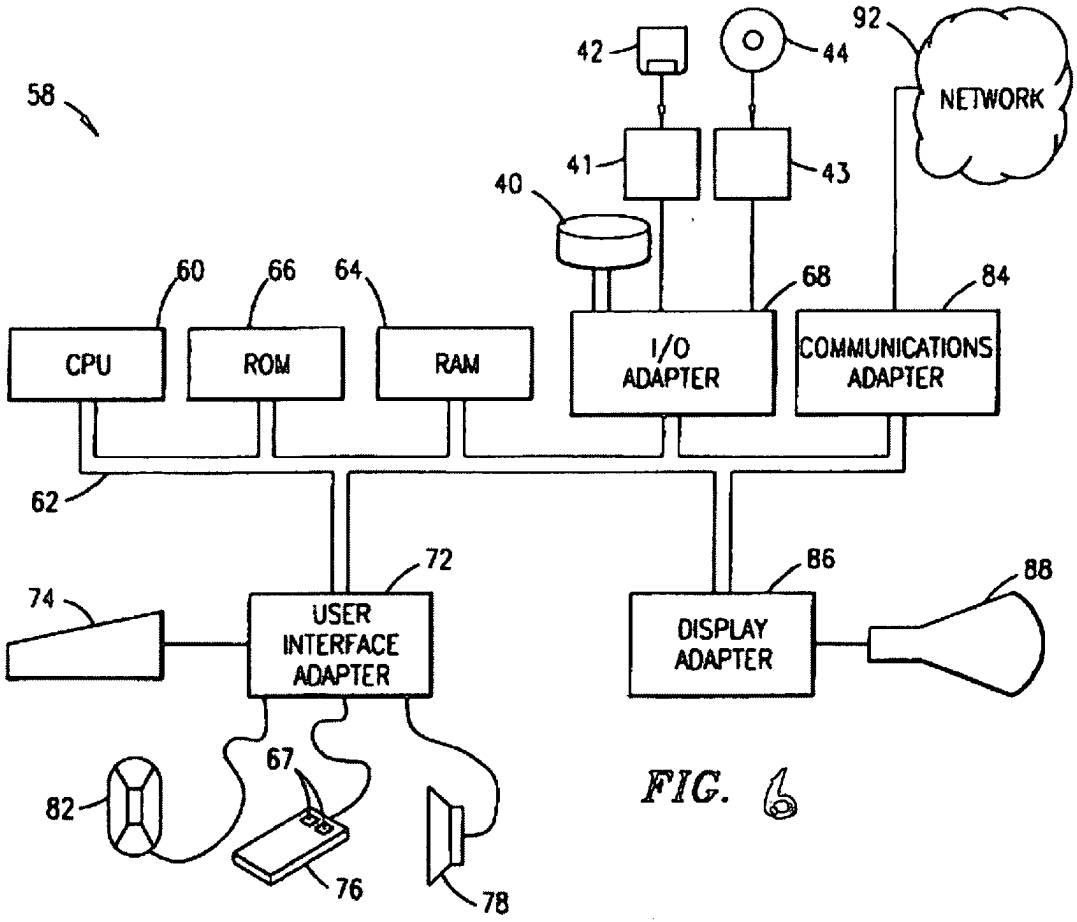

58
42
44
92
NETWORK
41
43
40
60
66
64
68
84
CPU
ROM
RAM
I/O ADAPTER
COMMUNICATIONS ADAPTER
62
72
86
88
74
USER INTERFACE ADAPTER
DISPLAY ADAPTER
67
82
76
78

FIG. 6

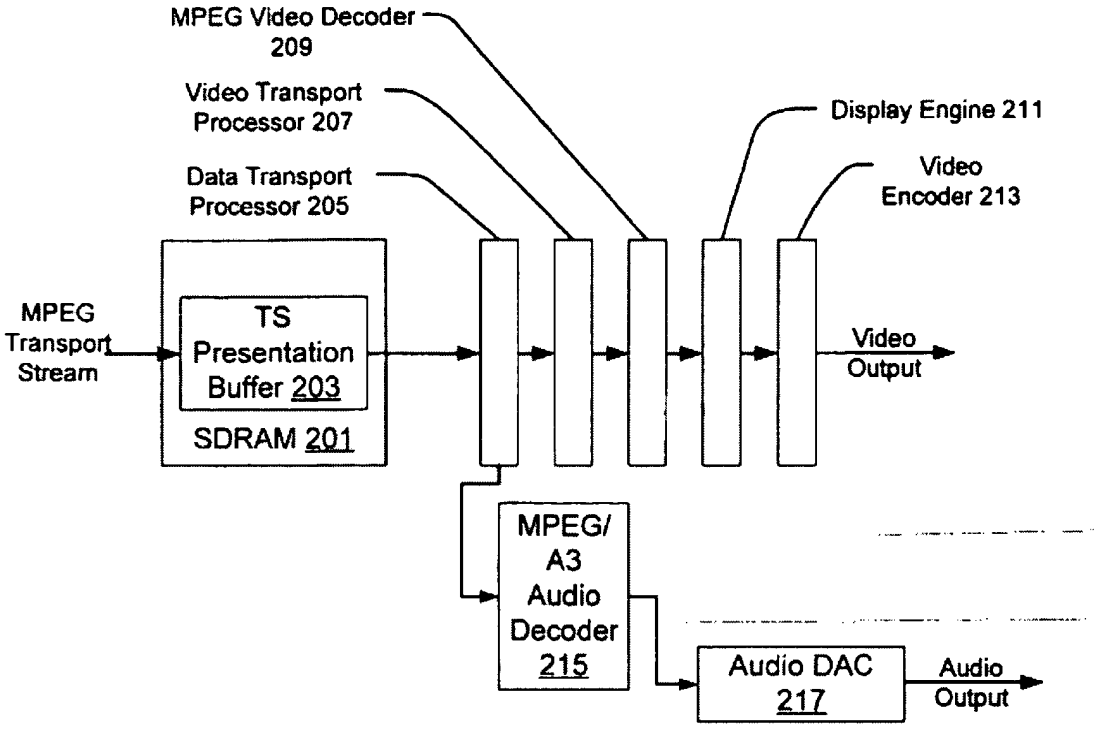

MPEG Video Decoder
209
Video Transport
Processor 207
Data Transport
Processor 205
Display Engine 211
Video
Encoder 213
MPEG
Transport
Stream
TS
Presentation
Buffer 203
SDRAM 201
Video
Output
MPEG/
A3
Audio
Decoder
215
Audio DAC
217
Audio
Output

FIG. 7

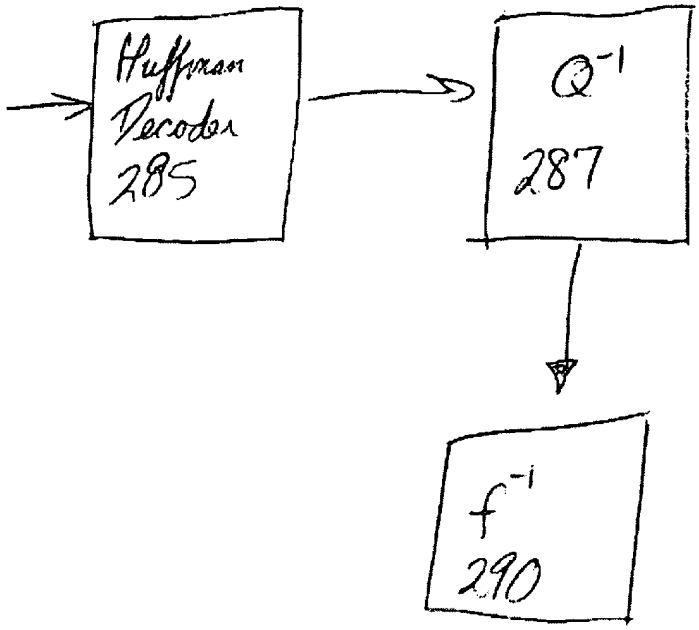


FIGURE 8